Type Depository: Entomological Museum, Forest Research Institute, Dehradun (U.P.), India.

Remarks: The species can be readily distinguished from other Indian species by its narrow and elongate body. It is also the only species that bears a row of erect setae on each interval of the elytra. Besides, the body is devoid of scales but for a few scattered patches and two oblique scaly bands-one in middle and the other on the declivity of the elytra.

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CONTRIBUTION TO THE KNOWLEDGE OF DESMIDS OF INDIA — SOME NEW TAXA FROM KARNATAKA STATE[1]

G. R. HEGDE[2]

(*With five text-figures*)

INTRODUCTION

Extensive collections from freshwater ponds and lakes of Shimoga District in Karnataka State (India) were made during Nov.-Dec. 1978. This district extends between 13°17′ & 14°39′N latitude and 74°38′ & 76°04′E longitude. The average temperature varies from 9°C to 38°C and the rainfall reaches 8275 mm in the region of Agumbe, which is known as the southern Chirapunji. The samples collected contained five new taxa of desmids and are described.

(Following abbreviations are used in the text: L = Length; W = Width; I = Isthmus and T = Thickness.)

Closterium prescottii sp. nov. (Fig. 1).

Cellulae fusiformes, cingulo medio praeditae, *c.* 10 plo longiores quam latae; margines laterales fere rectissimi a loco prope centrum ad polos angusta rotundatos; membrana interior incrassata ad polos; membrana cellularis 10-14 strias praebens.

Iconotypus: Fig. 1.

[1] Accepted September 1985.

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Locus typi: Ikkeri (Sagar).

Cells spindle shaped with median girdle band; about 10-11 times longer than wide; lateral margins almost perfectly straight from near the center to the narrowly rounded poles, inner wall thickened at the poles; cell wall with 10-15 striations. L 868 μm; W 67 μm; W pole 8 μm.

Iconotype: Fig. 1.

Distribution: Ikkeri (Sagar).

Closterium shimogaense sp. nov. (Fig. 2)

Cellulae fere rectae, *c.* 14 plo longiores quam latae, margines laterales utrimque paululo inflati; membrana cellularis 10-15 strias praebens; poli fere plani.

Iconotypus: Fig. 2.

Locus typi: Shimoga.

Cells almost straight, about 14 times longer than wide, lateral margins slightly inflated on both the sides; cell wall with 10-15 striations; poles almost flat. L 760 μm; W middle 55 μm.

Iconotype: Fig. 2.

Distribution: Shimoga.

Pleurotaenium verrucosum (Bail.) Lund. var. **validum** Scott et Grönbl. fa. **irregularis** fa. nov. (Fig. 3).

Varietas magnitudine varietati similis. Differens ut granuli polares plures, area infra polos ut videtur levis, areae incrassatae ambitu irregulares, areae tenues granulationes praebentes. Semicellulae paululum curvatas.

Iconotypus: Fig. 3.

Locus typi: Tyarendur.

Similar to the variety (Scott and Prescott 1961, pl. 5, fig. 9, p. 20) in size. Differs in having more number of polar granules; area below the poles apparently smooth; thickened areas irregular in outline, thin areas show granulations. Semicells slightly curved. L 445 μm; W 51 μm; I 46 μm; W pole 35 μm.

Iconotype: Fig. 3.

Distribution: Tyarendur.

Cosmarium miyajimense Hinode var. **papillatum** var. nov. (Fig. 4).

Varietas magnitudine formaque speciei similis, differens ut pori pauciores maioresque. Superficies papillam subapicalem obtusam habens. Isthmus comparate angustior.

Iconotypus: Fig. 4.

Locus typi: Agumbe.

Similar to the species (Hinode 1977, figs. 12 & 13, p. 84) in size and shape. Differs in having fewer and bigger pores. Surface with subapical blunt papillum. Isthmus comparatively narrower. L 21-22 μm; W 21-22 μm; I 3-4 μm; T 9-10 μm.

Iconotype: Fig. 4.

Distribution: Agumbe.

Staurastrum galeatum Turner var. **verrucosum** var. nov. (Fig. 5).

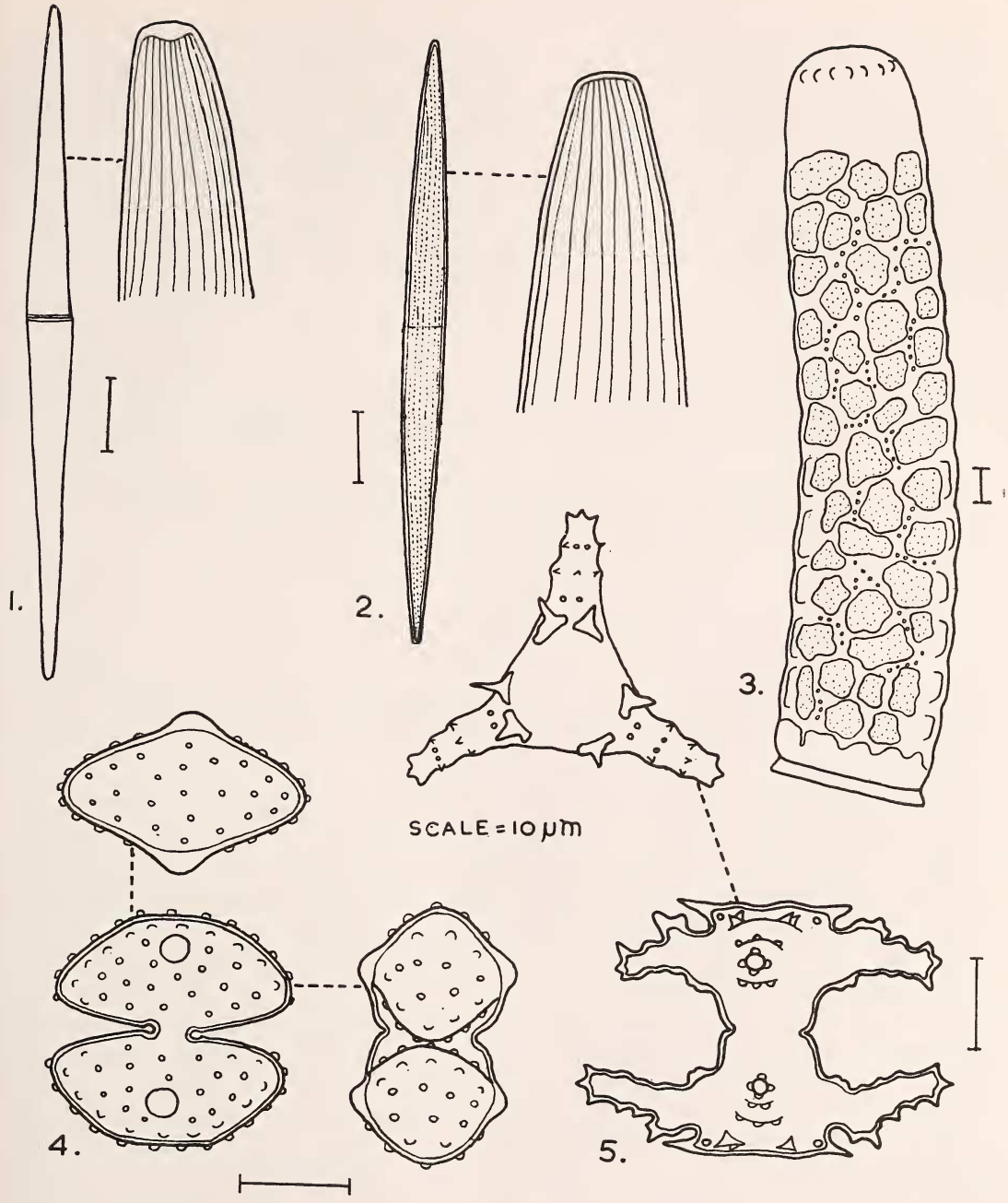
Varietas magnitudine speciei similis; differens processibus paululo brevioribus, crassis atque paululum incurvatis. Omnis processus verruca juxta basim in latere ventrali praeditus. Processus, speciei dissimiles, in 4 spinas terminantes. Verrucae in latere processuum dorsali, ad basim, comparate breviores. Semicellula a vertice visa triangularis anulum centralem verrucarum 3 spinis praeditarum praebens.

Iconotypus: Fig. 5.

Locus typi: Bharatipura (Agumbe).

Size similar to the species (Hirano 1959; pl. 52, fig. 4, p. 382) differs in having slightly shorter stout and slightly incurved arms. Each arm with a verruca near the base on ventral side. Unlike the species, arms end in 4 spines. On dorsal side of arms, near the base, the verrucae are comparatively shorter. Vertical view triangular with a central ring of verrucae having 3 spines. L 28-30 μm; W with arms 40-42 μm; I 7-8 μm.

Iconotype: Fig. 5.



Figs. 1-5.

1. *Closterium prescottii* sp. nov.; 2. *Closterium shimogaense* sp. nov.; 3. *Pleurotaenium verrucosum* (Bail.) Lund. var. *validum* Scott *et* Grönbl. fa. *irregularis* fa. nov.; 4. *Cosmarium miyajimense* Hinode var. *papillatum* var. nov.; 5. *Staurastrum galeatum* Turner var. *verrucosum* var. nov.

Distribution: Bharatipura (Agumbe).

Summary

Five new taxa of desmids (Chlorophyceae) collected from freshwater ponds and lakes of Shimoga district (Karnataka State) during Nov.-Dec. 1978 are described.

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DASINEURA PSORALEAE (DIPTERA: CECIDOMYIIDAE) — A NEW GALL-MIDGE, INFESTING INFLORESCENCES OF *PSORALEA CORYLIFOLIA* LINN.[1]

R. M. Sharma[2]

(*With thirteen text-figures*)

A new species of gall-midge, *Dasineura psoraleae* infesting the inflorescence of *Psoralea corylifolia* Linn. (Leguminosae) from Aurangabad (Maharashtra has been described and illustrated.

Genus *Dasineura* Rondani is represented in India by six species, Grover (1981). In November 1979 a large number of midges were bred from the inflorescence of *Psoralea corylifolia* Linn. at Aurangabad (Maharashtra) and were determined as assignable to the genus *Dasineura*. This midge is distinguished from the known species by many morphological characters. It does not cause any marked galls on the flower buds. The larvae fed on the ovary of the buds which ultimately fail to produce legumes. The larvae pupate in the flower-bud and not in the soil.

[1] Accepted July 1985.

[2] Zoological Survey of India, Western Regional Station, Pune - 411 016, India.

[3] Numbers in parentheses indicate length and breadth proportions, measured with the help of an oculometer.

Dasineura psoraleae sp. nov. (Figs. 1-13)

MALE: Body 1.91 mm long, yellowish-brown; eyes confluent above; trophi normal; palpus 4-segmented, moderately long, sparsely setose; first segment (9:6)[3] cylindrical, length 1.50 × its maximum thickness; second segment (19:8) cylindrical, length a little more than 2.37 × its maximum thickness; third segment (27:6) cylindrical, longer and thinner than second, length 4.50 × its maximum thickness; fourth segment (30:5) cylindrical, longest and thinnest of all, 6.00 × as long as thick. *Antenna*: shorter than body with 2 + 12 to 2 + 14 segments (2 + 13 in holotype), segments with cylindrical enlargements and long apical stems; enlargements with a whorl of long setae, circumfila ring-like; scape (14:21) cup-shaped, wider than long; pedicel (13:14) subglobose;